



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/627,674	07/28/2003	Rodrigo Ruiz	200206353-1	4606
22879	7590	06/28/2005	EXAMINER	
HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			FEGGINS, KRISTAL J	
			ART UNIT	PAPER NUMBER
			2861	

DATE MAILED: 06/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/627,674

Applicant(s)

RUIZ ET AL.

Examiner

K. Feggins

Art Unit

2861

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7, 17-21, 23, 24 and 27-29 is/are rejected.
- 7) ☒ Claim(s) 4-6, 8-16, 22, 25, 26, 30-35 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-3, 7, 17-20, 21, 23, 24, 27-29 are rejected under 35 U.S.C. 102(b) as being anticipated by Hada (US 6,218,660 B1).

Hada discloses the following claimed limitations:

* regarding claim 1, a hardcopy device/image color forming apparatus/ (Abstract) having a media feed path (col 3, lines 28-40) and a sensor system/25/ (col 4, lines 8-18) arranged to generate first and second images of a first portion of print media at first and second positions respectively along the feed path, the system being further arranged to compare the first and second images and thereby detect a change in the angle of skew of the media between the first and second positions (col 4, lines 47-69, col 5, lines 1-44, 62-67, col 6, lines 36-46, figs 1, 2, 4, 6, 7, 10, 11-13).

* regarding claim 2, wherein the system comprises first and second sensors, spaced apart in the direction of the media feed path, arranged to generate the first and second images respectively. (col 4, lines 8-18, 47-69, col 5, lines 1-44, 62-67, col 6, lines 36-46, figs 1, 2, 4, 6, 7, 10, 11-13).

* regarding claim 3, wherein the system comprises a sensor adapted to generate both the first and second images/P1..P8 or Q1...Q10/ (col 4, lines 47-69, col 5, lines 1-44, 62-67, col 6, lines 36-46, figs 1, 2, 4, 6, 7, 10, 11-13).

* regarding claim 7, wherein the one or more sensors are adapted to capture images of inherent physical aspects of the media (col 4, lines 47-69, col 5, lines 1-44, 62-67, col 6, lines 36-46, figs 1, 2, 4, 6, 7, 10, 11-13).

* further regarding claim 21, a sensor system for a printer device having a fed media path, the system arranged to generate a first image of a portion of print media at a first position along the fed path and to generate a second image of the portion of print media at a second position along the feed path, the system arranged to compare the first and second images and thereby detect a change in the angle of skew of the media between first and second positions (col 4, lines 47-69, col 5, lines 1-44, 62-67, col 6, lines 36-46, figs 1, 2, 4, 6, 7, 10, 11-13).

* regarding claim 23, wherein the system comprises a sensor adapted to generate both the first and second images/P1...P8 or Q1...Q10/ (col 4, lines 47-69, col 5, lines 1-44, 62-67, col 6, lines 36-46, figs 1, 2, 4, 6, 7, 10, 11-13).

Art Unit: 2861

* regarding claim 24, wherein the one or more sensors are adapted to capture images of inherent physical aspects of the media (col 4, lines 47-69, col 5, lines 1-44, 62-67, col 6, lines 36-46, figs 1, 2, 4, 6, 7, 10, 11-13).

* regarding claim 27, wherein system comprises one or more optical sensors (col 4, lines 47-69, col 5, lines 1-44, 62-67, col 6, lines 36-46, figs 1, 2, 4, 6, 7, 10, 11-13).

* regarding claim 28, a method of detecting skew of print media fed along a media feed path of a hard copy device, the method comprising the steps of; generating a first image of one or more features associated with a portion of print media at a first location along the feed path (col 4, lines 47-69, col 5, lines 1-44, 62-67, col 6, lines 36-46, figs 1, 2, 4, 6, 7, 10, 11-13);

* feeding the print media along a media feed path (figs 1, 2, 4, 6, 7, 10, 11-13);

* generating a second image of the one or more features at a second location along a feed path (col 4, lines 47-69, col 5, lines 1-44, 62-67, col 6, lines 36-46, figs 1, 2, 4, 6, 7, 10, 11-13);

* comparing the first and second images of the one or more features to determine if the orientation of the media relative to the feed path has changed between the imaging steps (col 4, lines 47-69, col 5, lines 1-44, 62-67, col 6, lines 36-46, figs 1, 2, 4, 6, 7, 10, 11-13).

Art Unit: 2861

* regarding claim 29, comprising the step of determine the distance that the one or more features have moved in a direction perpendicular to the media feed path direction (col 4, lines 47-69, col 5, lines 1-44, 62-67, col 6, lines 36-46, figs 1, 2, 4, 6, 7, 10, 11-13).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 17-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hada (US 6,218,660 B1) in view of Takeda (US 2003/0108372 A1)

Hada discloses the following claimed limitations:

* regarding claim 18, comprising of one or more optical sensors (col 4, lines 8-16, fig 3).

* regarding claim 19, wherein the one or more optical sensors are located in a substantially fixed location relative to the media fed path (col 4, lines 8-16, fig 3).

* regarding claim 20, wherein the one or more sensors are located in a media supporting surface, such as a platen, or the printer/sensor is located in the printer/ (col 4, lines 8-16, fig 3).

Hada does not disclose the following claimed limitations:

- * regarding claim 17, wherein the device is an inkjet printer.

Wen et al. discloses the following:

- * regarding claim 17, wherein the device is an inkjet printer (Abstract) for the purpose of providing an alignment structure for the print bar that adjust the position of print bar to compensate for receiver skew.

Allowable Subject Matter

5. Claims 4-6, 8-16, 22, 25, 26, 30-35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion


6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Takeda (US 2003/0108372 A1) disclose a sheet conveying device with sensor positioned at vertical angle and image forming apparatus. Ui et al. (US 6,340,984 B1) disclose an image forming apparatus for correcting an angle or inclination of the recording material and for recording corrected image. Wallace et al. (US 6,456,310 B1) disclose a bi-cell chevrons detection color registration system for color printing.

Communication With The USPTO

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to K. Feggins whose telephone number is 571-272-2254. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Talbott Dave can be reached on 571-272-1934. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


K. FEGGINS
PRIMARY EXAMINER